

KASSON TOWNSHIP MASTER PLAN

January, 2022

KASSON TOWNSHIP
LEELANAU COUNTY, MICHIGAN

“Root hog, or die.”
Kasson Freeman, Jr.

Planning Commission

Chairman	Gerry Roush
Vice-Chairman	Jim Anderson
Secretary	Chuck Schaeffer
Commissioners	David Noonan Tad Carter
Recording Secretary	Allison Hubley-Patterson(Vacant)

Township Board

Supervisor	Greg Julian
Clerk	Dana Boomer
Deputy Clerk	Sherri Nelson
Treasurer	Julia Carter
Trustees	Tad Carter Roger Noonan

Professional Staff

Zoning Administrator	Tim Cypher
----------------------	------------

Special Thanks

This 2022 update to the Kasson Township Master Plan involved the time commitment and hard work of five Planning Commission members. However, one Commissioner, whose name does not appear here, requires a special acknowledgement of her extensive knowledge, dedication, leadership, and expenditure of time that led to the finished product.

With her term expiring at the end of 2021, her contributions did not quite reach publication day. However, she still needs to be recognized here for two years of effort that produced a product with quality that would not have been there, otherwise.

Therefore, with gratitude of the rest of the Commission, we give a heart-felt thank you for everything, to Stella Otto - Planning Commissioner/Chairperson Extraordinaire.

Kasson Township

Mission Statement

Based upon its survey of community opinion and its analysis of township resources and opportunities, the Kasson Township Planning Commission shall endeavor to update the Master Plan to comprehensively address the community's needs. The success of the plan shall be measured by its ability to retain the good character and qualities of the community while guiding growth that benefits all its residents.

Township Planning Commission; purpose of plans.

The general purpose of a master plan is to guide and accomplish, in the planning jurisdiction and its environs, development that satisfies all of the following criteria:

- a) Is coordinated, adjusted, harmonious, efficient, and economical.
- b) Considers the character of the planning jurisdiction and its suitability for particular uses, judged in terms of such factors as trends in land and population development
- c) Will, in accordance with present and future needs, best promote public health, safety, order, convenience, prosperity, and general welfare
- d) Includes, among other things, promotion of or adequate provision for 1 or more of the following:
 - (i) A system of transportation to lessen congestion on streets and provide for safe and efficient movement of people and goods by motor vehicles, bicycles, pedestrians, and other legal users.
 - (ii) Safety from fire and other dangers.
 - (iii) Light and clean air.
 - (iv) Healthful and convenient distribution of population.
 - (v) Good civic design and arrangement.
 - (vi) Wise and efficient expenditure of public funds.
 - (vii) Public utilities such as sewage disposal and water supply and other public improvements.
 - (viii) Recreation.
 - (ix) The use of resources in accordance with their character and adaptability.

Michigan Planning Enabling Act – Act 33 of 2008 - Article I, Section 7, Paragraph (2)

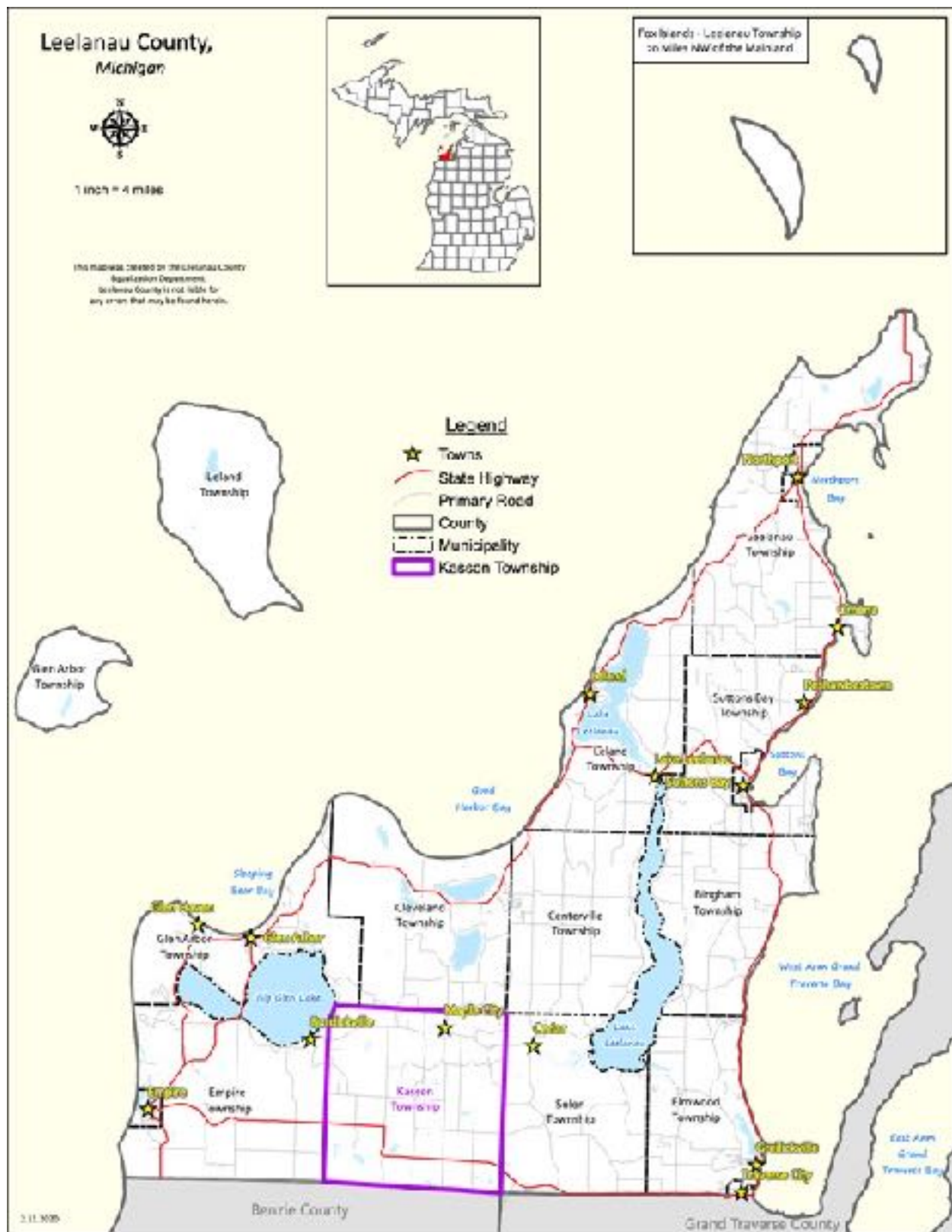


Table of Contents

Introduction	1
Basis for the Plan.....	3
Chapter 1 – The Process	3
Chapter 2 – 2019 Community Survey Analysis	4
Chapter 3 – The State of the Land	9
Chapter 4 – The Balance — Natural Areas, Agricultural Lands, & Open Space	11
Chapter 5 – The Gravel District	12
Chapter 6 – Future Land Uses.....	13
Goals and Policies	15
Chapter 7 – Environment.....	15
Natural Resources	15
The Area.....	18
Geography	18
Geologic Formations	19
Climate.....	20
Ecological Features	20
Soil Types	20
Hydrogeology	20
Water Resources	21
Flora and Fauna.....	21
Overview	21
Forests	22
Wetlands	22
Landmark Trees	22
Agricultural Cover	23
Long Term Objectives	23
Policies & Actions	23
Chapter 8 – Residential Land Use & Housing Policy.....	25
Long Term Objectives	27
Policies & Actions	27
Chapter 9 – Economic & Commercial Development	29
Long Term Objectives	31
Policies & Actions	32
Chapter 10 – Transportation	34

Long Term Objectives	34
Policies & Actions	36
Chapter 11 – Utilities & Public Services	37
Chapter 12 – Public Facilities	38
Township Hall.....	38
Schools.....	38
Cemeteries.....	38
Parks and Recreational Facilities.....	39
Long Term Objectives.....	40
Policies & Actions	40

Maps

<i><u>Figure 1 - Kasson Township Location</u></i>	v
<i><u>Figure 2 - Existing Land Use Map</u></i>	10
<i><u>Figure 3 - Future Land Use Map</u></i>	14
<i><u>Figure 4 - Delineation of Watersheds</u></i>	16
<i><u>Figure 5 - Elevation and 2017 Aerial Photo</u></i>	17
<i><u>Figure 6 - Soil Types</u></i>	19
<i><u>Figure 7 - Parcels with Residences</u></i>	26
<i><u>Figure 8 - Local Road Network</u></i>	35

PAGE INTENTIONALLY LEFT BLANK

Introduction

Kasson Township is located in south central Leelanau County. Traverse City lies about 15 miles to the east on Grand Traverse Bay, and Empire is about 12 miles to the west on Lake Michigan.

The people, predominantly of German, Polish and British heritage, are middle class, home-owning, and family oriented. Although not a young population (the median age is 48), it is younger than the County as a whole (54.1). As indicated by the community survey, residents value the rural, undeveloped nature of the township above any of its other attributes.

Kasson Township has been endowed with a combination of natural beauty and rich resources which have shaped, and continue to shape, its destiny. Almost 36 square miles with 1457 residents in 2020, the township is covered predominantly by forests. There are a few orchards and some large areas of crop and pastureland, primarily located in the center of the Township.

Settled largely because of the Homestead Act of 1862, farming, logging and other uses of the abundant natural resources prevailed. The unincorporated village of Maple City, originally called Peg Town, was founded in 1866 and is now the only densely settled area in the township. The village has a post office, gasoline station, restaurants, and other services including a Leelanau County Road Commission garage. Oviatt, on the border with Almira Township and Benzie County, once another rural village in the township, is now only a crossroad.

Kasson Township does not have the abundant water resources that much of the rest of the County has, only touching Glen Lake at the northwest corner of the township and having a few scattered small lakes and streams. The rolling, tree-covered countryside conceals extensive gravel beds that underlie a large portion of the western part of the Township. This rich resource has been used, and continues to be used, in the building of roads, houses, and other structures throughout the region.

Additionally, the township is the site of the regional landfill, a private operation covering 400 total acres, 133 of which could contain solid waste cells, with a potential to serve 10-13 counties.

Township residents must expect outside pressures to come to bear on Kasson Township. These outside pressures are:

- 1) A slight population increase in Leelanau County. Leelanau County grew from 21,708 in 2010, to 22,301 in 2020. This is an increase of 593 persons, or 3%.
- 2) An ongoing trend toward more recreational activities and tourism. These trends are encouraged by the state, as well as by local entrepreneurs.
- 3) The area-wide pressures to utilize existing landfill and gravel sites rather than open new areas.

The latter pressures result from both landfills and gravel operations being classified as locally undesirable land uses. Because Kasson Township is already home to these activities, there will be escalating pressures from outside the area to increase the level of these operations as the area grows and area-wide needs increase. It is critical that the Township develop standards and guidelines for dealing with the potential changes in these two operations.

The most pressing danger from not addressing these issues aggressively is that, because of the previously mentioned outside pressures, a superior legislative body may mandate a local course of

action if local leadership is not being exercised. The potential for mandated action must be treated as very real. There is a national recognition of the importance of the Great Lakes' watershed as a national resource, and both landfill and gravel mining operations can affect this watershed.

These then are the challenges and the purpose of the plan: to address the pleasures, as well as the pressures and problems deriving from the combination of the splendid natural beauty and the abundant usable natural resources of Kasson Township.

FINAL

Basis for the Plan

Chapter 1 – The Process

For the past several years the Kasson Township Planning Commission has been grappling with land use issues in the township caused by the mixed blessings of its natural resources and the increasing demand for residential housing.

The Zoning Ordinance was revised in 1989 to address gravel extraction and other types of mining by making these uses allowable only by special use permit. In 1992 the commission performed a community opinion survey to obtain residents' and other landowners' views on several planning and development issues.

In the summer of 1994, the Commission hired Don Hamilton to aid it in completing a Master Plan. At that time the Planning Commission began an intensive review of maps and data relevant to the preparation of the plan. The commission reviewed demographic data and regional economic figures. It studied the geography of the area by examining maps illustrating topography, forests, farmland and soils. Important landmarks, views, and significant natural areas throughout the township were identified.

From the earlier studies, the community survey, and these later investigations, the Master Plan was written. The plan is shaped by the community's residents' needs and desires as indicated by the survey, by their participation at meetings and hearings during the planning process, and by the commission's desire to create the best plan possible for Kasson Township.

After appropriate input from both Leelanau County and the citizens of Kasson Township, the Master Plan was approved in November 1995. It was amended in January 1997 to include a commercial district on East Kasson Road. After approval, the Planning Commission completed a total revision of the Township Zoning Ordinance to support the goals of the Master Plan. The revised Zoning Ordinance was originally adopted in 1997 and revised with amendments through November 2001. With the availability of subsequent updated Census data, the Kasson Township Master Plan was reviewed and revised in 2003 and adopted in December 2004. It was again updated during 2013-14. The most recent review and revision was undertaken starting in early 2020. The unprecedented Covid-19 pandemic delayed gathering of Census information and may have skewed other local demographic data as well. After an extended timeline, the current revision was completed in January 2022.

Chapter 2 – 2019 Community Survey Analysis

In October 2019 another community survey was conducted in preparation for the upcoming Master Plan review. Of the 948 surveys distributed, 303 (32%) responses were received. All but two of those came from township residents or property owners.

As was the case with prior surveys, strong majorities wanted most development to be rural, affordable residential, or recreational uses. Although respondents value the natural environment, they were not in favor of adding to parks; the majority noting that they rarely use the park in downtown Maple City. They continued to want to see forests, view property, and farms preserved.

Land uses garnering the most opposition were gravel pits, landfills (including the existing one), junk accumulation, industrial facilities, and any activities destroying peace and quiet.

Some shifts in demographics were noted from the prior survey to the most recent. It is unclear whether this is attributable to the questions asked, who responded, or a true demographic shift. Notable differences occur in home ownership rates - currently 74% vs. 90% for past responses. Most recent survey results indicate 43 % full-time employed vs. 63% in the past. Retired residents has risen to 40% from 33% the last time the township was surveyed. The percentage of those living in the township ten or fewer years shrank from 52% in the past to a current 33%.

Results showed the following for how long residents had lived in the township:

0-5 years – 52 (20%)
6-10 years – 35 (13%)
11-15 years – 27 (10%)
16-20 years – 34 (13%)

21-30 years – 54 (20%)
31 years or more – 63 (24%)

Slightly less than 74% of respondents own their home, slightly less than 19% rent, while just shy of 7 % appear to own property without a dwelling on it. Households that included **just** two adults made up 75% of the responses, while 78% of the households had no children living there.

The township population is divided almost evenly between those employed full-time, 43%, and retirees, 40%, respectively. The smaller remainder either work part-time or are self-employed. The bulk of those employed worked almost evenly distributed either in Kasson Township or Traverse City. A much smaller percentage indicated they worked in Empire, Grand Traverse area, elsewhere within Leelanau County, or out of state.

The survey showed clearly that respondents put a high value on the natural environment and outdoor recreational opportunities within the township. Multiple answers to the question were allowed. When asked “**What qualities do you like the most about living in Kasson Township**” results were as follows (in descending order):

Wildlife/birds/nature – 236
Natural Beauty – 258
Simple way of life – 192
Water and air – 178
Open space – 173
Agricultural surroundings – 168
Recreational opportunities – 149
Hunting & fishing – 109
School system – 96
Neighbors – 92

Taxes – 78
Ability to have home occupation – 67
Roads/streets – 65
Traffic – 62
Living close to work – 55
Affordable housing – 23
Convenience for shopping/services – 14
Public services – 10

Least liked characteristics of the township (again with multiple responses allowed) were as follows:

Conversion of farmland – 96
Desire for “citification” – 71
Traffic – 67
Taxes – 58
Suburban sprawl – 56
Housing prices – 53
Drug activity – 44

Government regulation – 38
Pollution – 36
Demand for housing – 30
Crowding – 30
Public services – 18
Neighbors – 16

The vast majority, 88%, responded that they were happy living in the township and would probably stay for at least the next 5 years.

Fire and EMS services were **rated** satisfactory by the vast number of respondents. Less than 7% were dissatisfied with those services. By a 40-60 split (yes/no), most did not favor adding an additional location for a second fire station. Some concerns were expressed by those living on the west side of the township (farthest from the fire station in Cedar) that response times were too long (up to 30 minutes) and that this **e** affected both their safety and insurance rates. Consequently, some favored cooperating with neighboring departments in Empire, Gle~~a~~n Arbor, and Almira ~~t~~ Township. Overall, the desire to see the township provide additional public services was very minimal.

With multiple answers allowed, these issues were identified as being the priorities that respondents wanted the township to focus on:

Protection of ground water – 194
Preservation of large, forested tracts – 187
Protection of scenic views – 183
Preservation of agricultural areas – 178
Junk/litter – 134
Preservation of historic buildings – 127

Cell phone/wireless towers – 84
Septic systems – 82
Housing density – 60
Speed limits – 50
Short-term/seasonal rentals – 33
Signs – 24

Key concerns that respondents felt were not being adequately addressed were:

Junk/abandoned cars – 82	Litter – 34
Miscellaneous junk – 70	Vegetation height (weeds and brush) – 23
Noise/odor/dust/light/ vibration pollution – 49	Unattended pets – 20
Maintenance of vacant buildings – 39	Storage of recreational vehicles – 11
	Fences – 4

Favored minimum lot sizes in the township were indicated as follows:

5 acres – 81	10 acres – 28
2 acres – 53	15 acres or more – 2
1 acre – 49	
Less than 1 acre – 30	

Smaller parcels, higher density lots were generally indicated as appropriate minimums for the Village of Maple City:

Less than 1 acre – 117	10 acres – 1
1 acre – 57	15 acres or more – 0
5 acres – 3	
2 acres – 6	

Acceptable dwelling types were ranked accordingly:

Single family homes (detached) - 203	Clustered houses – 40
Affordable housing – 133	Apartments (3+ units) – 39
Tiny homes – 103	Condos (attached) – 37
Senior residential – 102	Seasonal rentals – 23
Duplexes – 59	Mobile homes – 10
Modular housing – 41	

When asked “During the next five years, should the township consider enlarging the current commercially zoned areas for...?” response numbers were generally low in comparison to the other questions in the survey. (Multiple choice were allowed.) Rankings were:

Retailing – 77	Gasoline sales – 28
Offices and services – 76	Gravel mining – 14
Marijuana growing and sales – 36	Landfills – 5
Auto repairs – 32	Strip malls – 2
Manufacturing – 32	Junk yards – 1
Hotels and motels – 30	

Twenty percent of responses favored expanding the commercial districts in the township, 80% did not.

When the open-ended question asked what other businesses people would like to see in the township, comments fell into several main categories:

Retail - hardware store, boutiques, retail tourist attractions, agricultural feed/parts store, auto parts, specialty plant nursery/garden center, Dollar General, and conversely, no chain stores or Dollar General

Food Retail - grocery store, farm markets, bakery, meat processing plant

Eateries - family owned restaurants, ice cream parlor; coffee shop, pizza delivery, wineries, microbreweries

Medical services - doctors, medical clinic, dentist, drug store, veterinarian, medical marijuana dispensary

Professional services - bookkeeper, professional office space/co-working office with high tech services shared

Other services - day care, childhood services, head start, hair salon, a really good mechanic, gym/fitness center with a swimming pool, car wash, laundromat,

Other comments that did not fall into the above categories, but that are reflective of the potential economic, employment, and housing base of the township included:

Better internet
Small businesses for jobs
More jobs to keep people here
Year-round businesses
Light industrial
Manufacturing, General Service
Manufacturing jobs
Small hotels, no chains
Satellite library
Affordable housing for seniors
Locally owned, small scale, nonpolluting,
production of useful, beautiful, durable
goods

Chapter 3 – The State of the Land

Farms and single-family residences are the dominant land uses in Kasson Township. There are a few scattered small businesses throughout the township, but much commercial and cultural activity is concentrated in Maple City near the northern border with Cleveland Township. The most intensive use is gravel mining and processing and concrete plants. The area school, a county road commission garage, the regional landfill, a county park, a township park, a small unit of Sleeping Bear Dunes National Lakeshore, as well as a fair amount of state forest lands, are located within the township. The forested landscape predominates, and with a population density of only 40 people per square mile, the Township remains distinctly rural.

The following map depicts the status of the lands in Kasson Township. It is GIS generated by the Leelanau County Planning and Community Development. Much of what we have already stated is shown clearly on this map - the sparse human population, the development of residences, the present widespread agricultural areas, and the predominant forest cover.

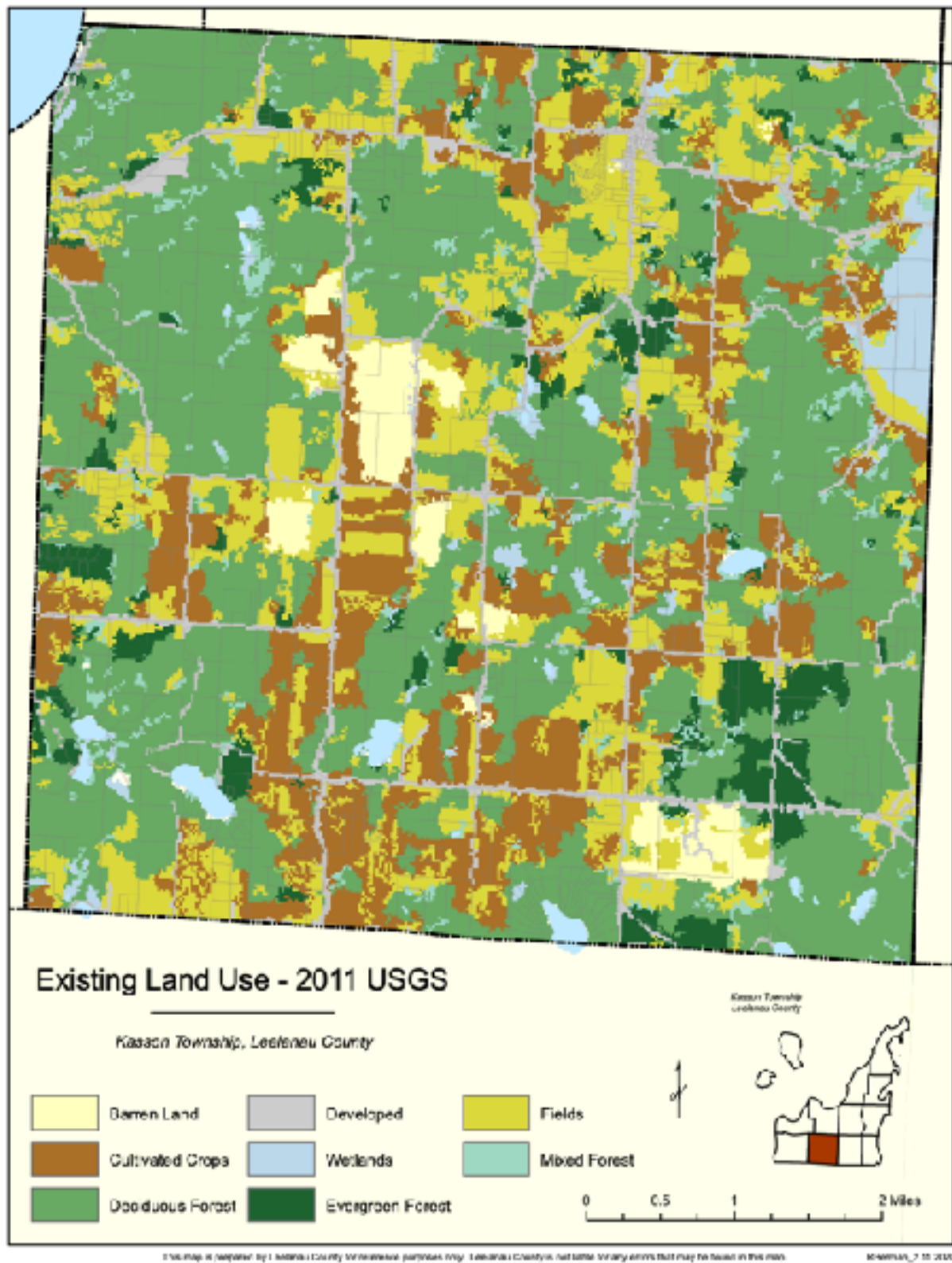


Figure 2 - Existing Land Use Map

Chapter 4 – The Balance — Natural Areas, Agricultural Lands, & Open Space

This Plan is based upon the understanding that the beauty and quality of life in Kasson Township springs from the bounty of its natural resources — the hills, forests, fields, and lakes; and the balanced arrangement of these with its farms and village areas. It is the harmonious blending of these elements, without one dominating the others, that produces the satisfaction of community residents and that draws tourists and residents alike to the township. This plan intends to maintain this balance.

The bounty of the natural resources in Kasson Township is also found in the rich deposits of gravel which underlie a good portion of the township and in the conditions that have contributed to the creation of a regional solid waste landfill located in the township. This plan recognizes the value of these assets but declares the community's interests. It proposes measures to address them, in having the development of these assets performed in ways beneficial to all the township's residents.

Chapter 5 – The Gravel District

The Kasson Township Board and Planning Commission ~~has~~ **have** concluded that allowing uncontrolled expansion of gravel mining, extraction, and other collateral activities, can result in a gross change in the balance of the qualities of life in Kasson Township. But the Commission and Township Board also believes, if encouraged in specified areas, with the proper controls (many having already been added to the Zoning Ordinance), with comprehensive and rigorous reclamation standards, and the identification of uses to be allowed after mining and extraction activities have ceased, that gravel mining is a beneficial use for the community.

Therefore, this Land Use Plan defines a Gravel Mining District. This district contains allowed, conditional uses and uses allowed only by a special use permit. It also provides for future uses that will be allowed upon reclamation of mined areas.

Standards for before and after mining operations are promulgated in the Zoning Ordinance. It defines clearly the potential activities proposed for the district and provides developers precise standards for operations, reclamation, and future uses.

In the early 2020's the Michigan Aggregates Association (MAA), in collaboration with downstate legislators, introduced legislation (SB 431 of 2020) that would remove almost all local government control to regulate gravel extraction, and move the powers to the state government. Widespread resistance from local governments was brought to the legislators in Lansing during a series of legislative hearings.

The proponents used as arguments that the current method of local regulation drives up the price of aggregates used in highway construction and repairs and therefore reduces the number of miles that can be constructed for a given level of appropriations. Additionally, the proponents argue that there is a shortage of aggregate so that materials must be transported over long distances from existing mines to work sites, further driving up the cost of road construction.

Local government argues that with adequate and reasonable local zoning, residents are given clear notice of where permitted mining activities are allowed. These local regulations are developed by local members of boards and commissions - in a way to protect their residents, in the context of specific local circumstances which will obviously vary from community to community.

In particular, Kasson Township has approximately 3,100 acres of its 23,000 acres (approximately 14%) already defined as available for gravel extraction. Even though approximately 1,500 acres ~~has~~ **have** already been mined, the township testified in a Supreme Court challenge to its ordinance that the township still has over a 50-75 year supply. In that case, the Court determined that a crucial element for requesting rezoning for mining, rests on the ability of the petitioner to prove that there is also a need for the gravel in the regional market.

The fate of SB 431 was sealed when the 2019-2020 session of the legislature expired without a vote coming to the floor. However, there is no indication that the efforts of the MAA have expired.

Chapter 6 – Future Land Uses

The designated land uses indicated by the Future Land Uses Map represent the means by which the Kasson Township Planning Commission intends to reach the goals and objectives in this plan. This plan emphasizes preserving certain valuable township resources by directing development in ways that protect the environment. At the same time, it encourages the careful development of others with an eye ~~still~~ toward the future wise use of the land. The rural character of the township is intended to be preserved while diversity and accessibility are fostered.

As was portrayed, a gravel district is defined in order to confine gravel mining to the areas already being mined and to those areas identified as having the best deposits for mining. It is the commission's position that sufficient deposits will exist within this designated area for the foreseeable future and that no other area in the township shall be developed for this purpose. Other allowed current and future uses within this district shall be specified in the Zoning Ordinance.

Also designated is an agricultural district where the primary use shall be farming and associated activities.

Two districts are designated with the primary human activity being residential: forest residential and higher density residential. Residential uses will also be allowed in the mixed-use areas of the village.

Four small areas are designated for light commercial use.

The desired state of the land in each district is indicated by its name - Gravel, Agricultural, Forested, Higher Density Residential, Mixed-use, Light Commercial, Special Purpose and Planned Development.

The Zoning Ordinance designates allowed and conditional uses for each district. Densities are selected for each district with performance standards enumerated to ensure deliberate and proper land development and the maintenance of township resources.

The designations on the Future Land Uses Map are general in nature and therefore not intended to correspond to property lines. The Planning Commission and the Township Board shall rezone particular properties as they see fit to implement the plan in an orderly and prudent fashion.

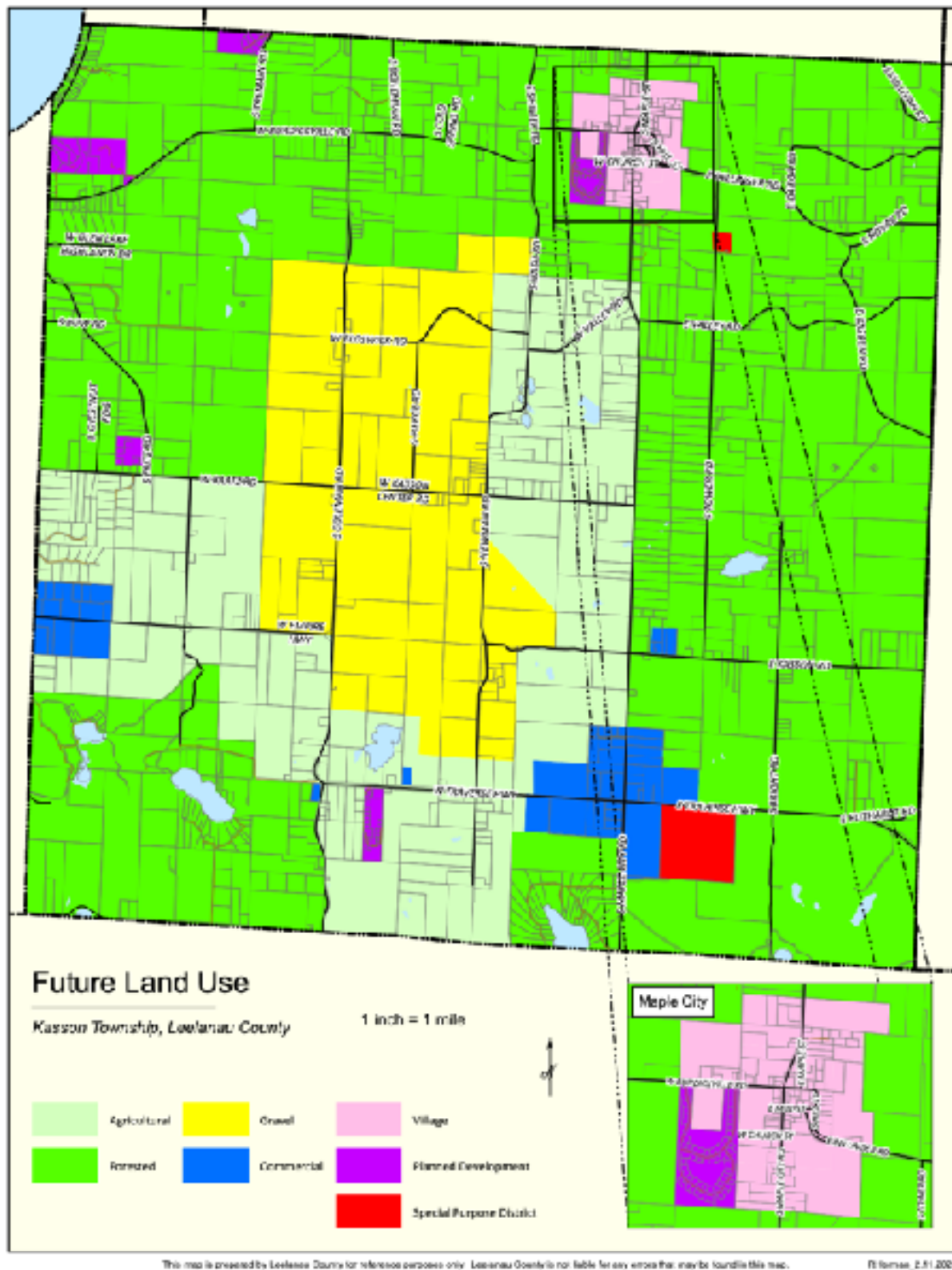


Figure 3 - Future Land Use Map

Goals and Policies

Chapter 7 – Goals & Policies Environment

Natural Resources

As has been stated repeatedly in this P plan, the natural resources of Kasson Township are the foundation of its wealth, not just the means for production of goods, for logging, agriculture, and gravel extraction, but for the beauty and tranquility sought and enjoyed by its residents. This P plan seeks to identify the important natural assets of the township and to suggest the means to preserve them to the greatest extent possible. In addition to areas of the township owned by the State of Michigan and the Department of the Interior that are managed for both tourist amenities and productive resources, this P plan puts forth standards and methods for retaining natural resources throughout the township.

In the "Residential Housing" section, the P plan proposes two residential districts, ~~two~~ both of them promoting the preservation of native terrain. One district encourages the preservation of farmland in particular and one is protective of woodlands. Both espouse retaining as much natural and undeveloped area as possible. The Economic and Commercial Development section of the P plan requires non-polluting and non-intrusive enterprises and calls for value-added activities for commodities produced in the township. Future ordinances promulgated by the township will reinforce these objectives and policies and provide the framework for the implementation of them.

As this section further suggests, additional, more detailed studies might be undertaken, either at the township, county or regional levels, to more accurately identify essential ecosystems, to define the necessary bounds and conditions for their health and vigor, and to propose the means to maintain them.

A review of watershed management plans for the four watersheds within Kasson Township help determine locations and bounds of these essential sensitive ecosystems. Figure 4 identifies these watersheds and delineates their boundaries. Watershed plans have been developed and approved by EGLE (Michigan Department of Environment, Great Lakes, & Energy) for all 4 of these watersheds — Glen Lake-Crystal River Watershed, Lake Leelanau Watershed, Platte River Watershed, and Good Harbor Watershed.

Details of these plans can be found on the Leelanau Conservancy website at <https://www.leelanauconservancy.org/our-work/water/watershed>.

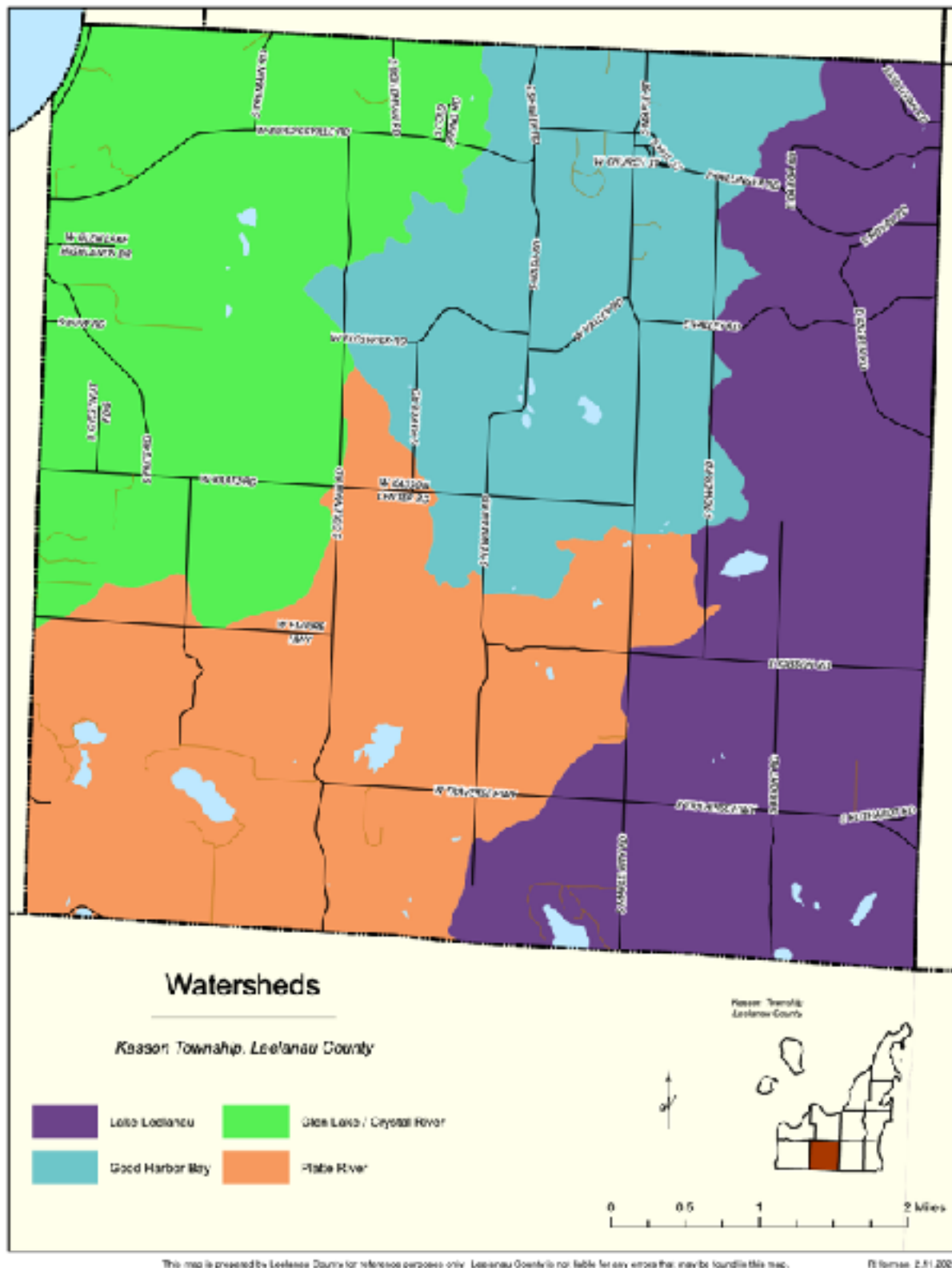


Figure 4 - Delineation of Watersheds

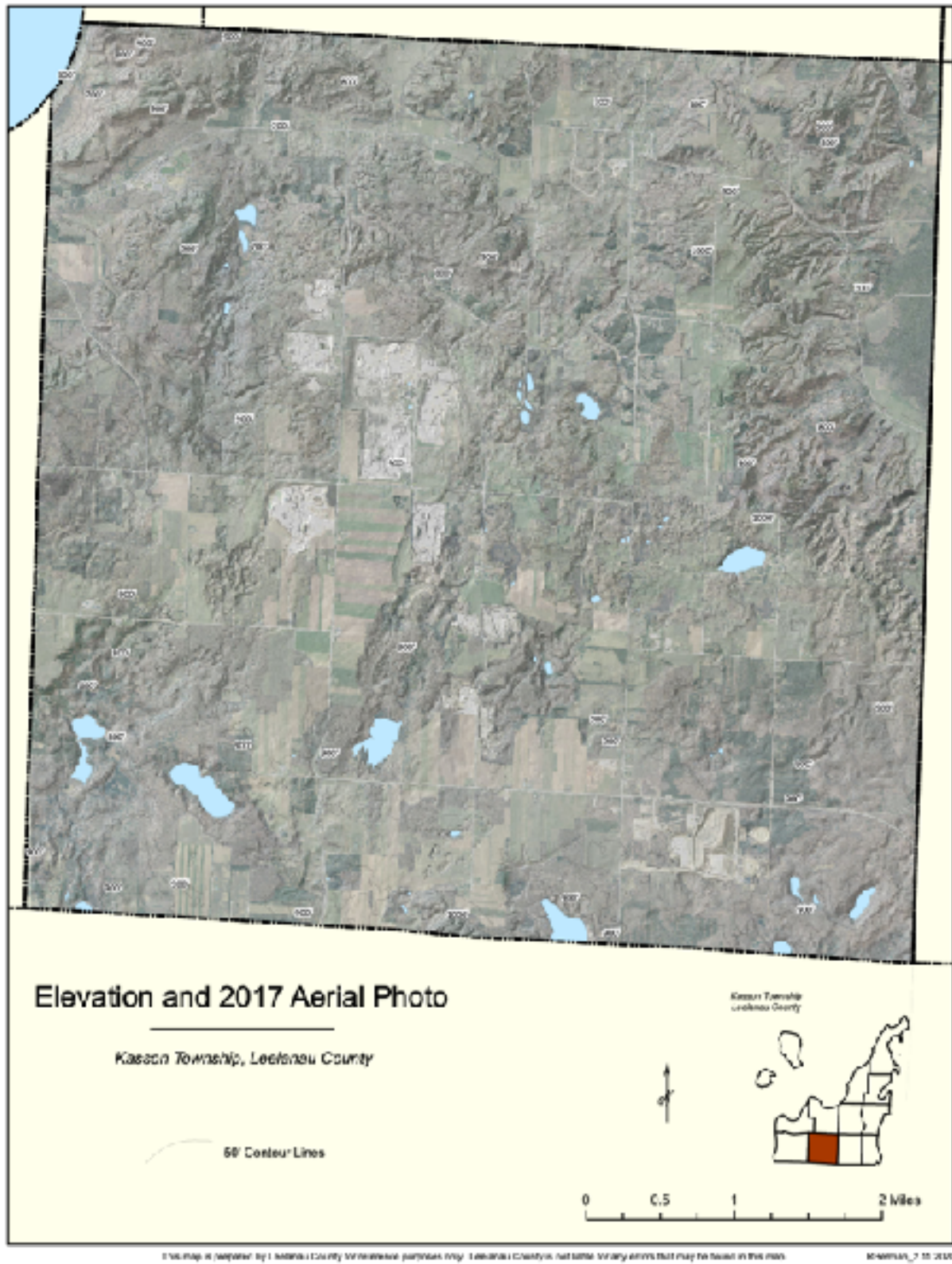


Figure 5 - Elevation and 2017 Aerial Photo

The Area

Kasson Township, Leelanau County, has a land area of approximately 36 square miles and is in the Grand Traverse Region of northwestern Lower Michigan. Much of the terrain has been influenced in earlier times by farming, logging, and other human settlement activities. Currently most of the township is occupied by second growth hardwood forests; agricultural lands; and fallow, open ground. The natural beauty of the township is largely intact and un-compromised.

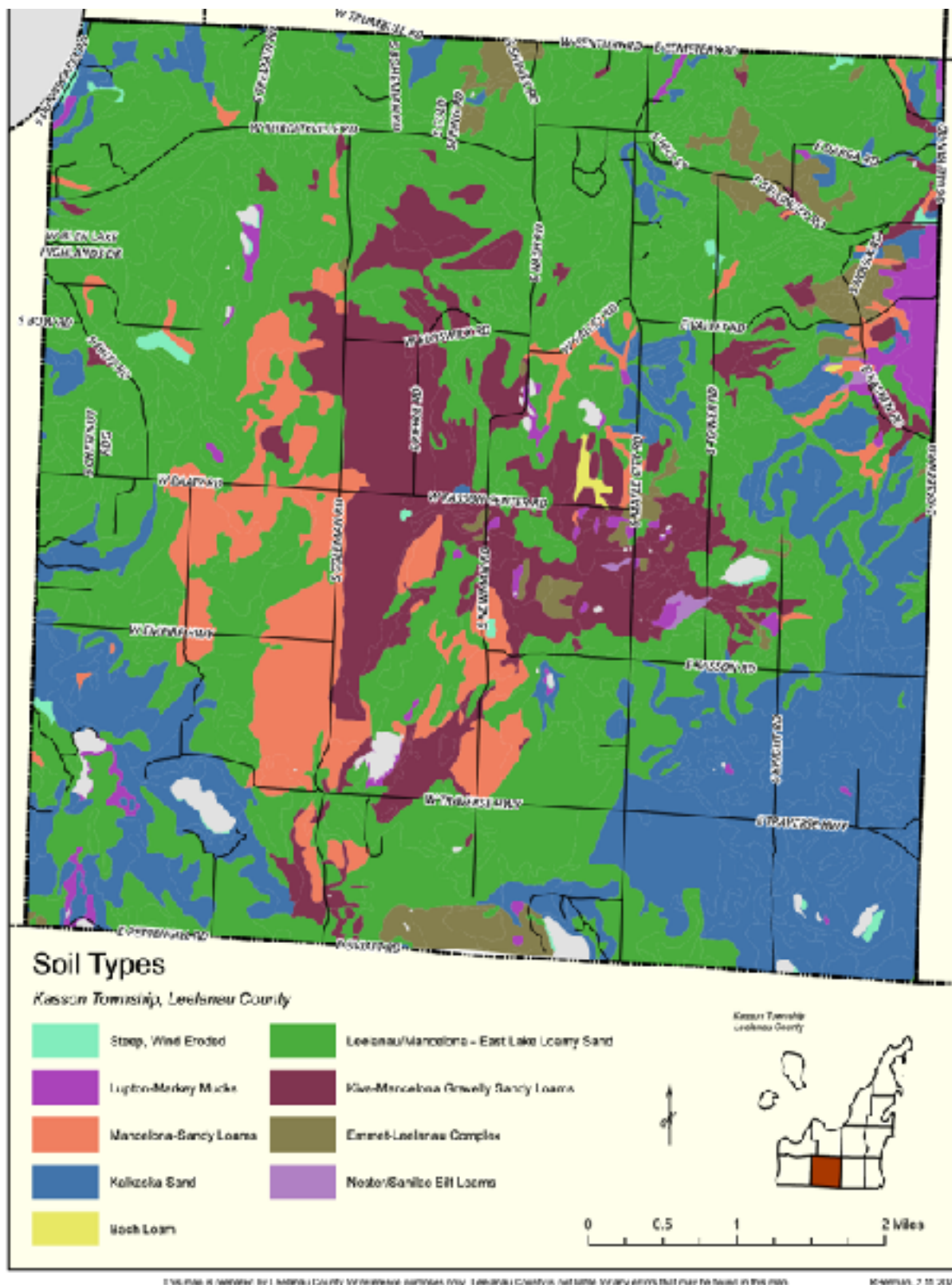
In the Grand Traverse Region, urban and resort development is growing at an unprecedented rate. Kasson Township's natural amenities have yet to be grossly affected by this second wave of immigrant occupation. However, an absence of planning could result in rapid degradation of these amenities. Fortunately, concomitant with sprawling urbanization and resort development has come an intensified concern for the management and preservation of natural and scenic resources. Increased human occupation and increased use of natural resources, in the mode we have experienced in this country in the last thirty years, destroys many of the values associated with a rural lifestyle. If the township is to avoid the degradation or destruction of scenic and natural resources on which rural quality of life depends, then planning measures must be undertaken in a wise and timely manner.

A significant number of natural preservation activities are being pursued by federal, state, and local organizations. The Leelanau County Planning and Community Development office is involved in several activities to protect water, land, and biological resources. This includes natural features mapping and ordinance writing support; and thus, the quality of life available to county residents and visitors. The Great Lakes Clean Water Initiative undertaken by EPA in March of 1995 will provide measures, in cooperation with Canada, to clean up all the Great Lakes. Regional groups, such as the Grand Traverse Bay Watershed Initiative, are actively promoting natural resource protection in the area. The Leelanau Conservancy educates local residents and outsiders about the county's natural environment as well as vigorously pursuing conservation easements throughout the county.

Geography

Referring to Figure 4, the four watershed areas within Kasson Township, each drain to the water bodies indicated by their names. The major water body closest in proximity to Kasson Township is Glen Lake which drains through the Crystal River to Lake Michigan. Glen Lake receives a significant volume of groundwater recharge from the northwestern part of Kasson Township as that area feeds the eastern branch of Hatlem Creek, the sole major tributary to Glen Lake (Ref. Glen Lake Crystal River Watershed Management Plan).

The township has a diversity of physiographic features. Some areas, especially in the south and southwest, are level to gently sloping land. But a greater proportion of the township is moderately to steeply sloping. Surface elevations range from an approximate mean lake level of 597 feet at Glen Lake to approximately 1037 feet at the highest part of Tower Road, an elevation gradient of 440 feet.



Geologic

Formations

The northwest half of the township is underlain by a bedrock of Antrim Shale and the southeast half is underlain by Ellsworth Shale. Most of the bedrock is at a depth that varies between 400 and 800 feet. These geologic formations are the result of marine conditions that existed approximately 325 million years ago during the Mississippian period of the Paleozoic era.

The glacial drift that overlies the bedrock was mostly deposited during the Valdres Maximum glacial event, approximately 11,500 years ago. Township lands were formed when the last glacial ice sheet retreated, and the melt water levels receded to form the existing lake shorelines, bluffs, and benches. Glacial Lake Algonquin resulted from the coalescence of glacial Lakes Saginaw and Chicago. Lake Algonquin shoreline dynamics (elevation 605 feet) sculpted the drift and had a major impact on the current land formation.

Climate

The climate of Kasson Township is tempered by its proximity to Lake Michigan. Topographic relief, aspect, and distance significantly alter the growing season length — an approximate average is 135-149 days — for points throughout the township. For Leelanau County the average date of the latest freezing temperature is May 15-May 21, and the average date of earliest freezing temperature is October 3-October 11. (Information taken from the National Weather Service, Gaylord, Michigan Office, "Northern Michigan Climatology"

Ecological Features

Soil Types

The general soil types occurring in Kasson Township are depicted in Figure 5 6 – Soil Types found in Kasson Township. Most of soils are well-drained and sandy. The northeast half of the township is mostly morainal soils, e.g., Leelanau-Mancelona Association and Kalkaska-East Lake Association. These tend to be hilly areas of loamy sands. The southwest part of the township is largely outwash plain deposits, e.g., Kalkaska-Mancelona Association and Kiva-Mancelona Association. Gravel and sand deposits are a significant element of the outwash material. The outwash plains are nearly level to gently sloping, but are deeply pitted in some places, especially near their borders. In general, the Kiva-Mancelona gravelly sandy loams 0 - 6% slopes are locally and statewide important soils. Nearly level areas are suited to field crops and hay; and steeper areas are well-suited to pasture, woods, or wildlife habitat. The Kalkaska Association soils are not generally well-suited to field crops. Woodlands, pine plantations, and abandoned farms are common on these soils. The soils in the township are generally not well-suited to cherry production.

Hydrogeology

A hydrological study (Wenck) was conducted as part of the Glen's Sanitary Landfill Construction Permit Application. A copy of the report pertaining to hydrogeology is attached to the "Ecological & Natural Features Report" as Appendix A., in the Township Clerk's possession.

For more information regarding the hydrogeology, the township map of oil and gas, and water well locations is available from the MDNR Geological Division. Information on obtaining these and other groundwater database materials is presented in Appendix B of the above noted report.

A hydrological assessment was conducted for the Leelanau County Circuit Court Technical Committee. Its purpose was to define the water budget to more effectively control the Crystal River dam in order to manage the Glen Lake water level and flow of the Crystal River. The October 2009 report delineates the Glen Lake-Crystal River groundwater watershed. Kasson Township includes a significant portion of this groundwater watershed. The report estimates that a significant volume of groundwater flow recharges the ~~Haltem~~ **Haltem** Creek sub-watershed (part of which is in the west central part of Kasson Township and defined in the 2009 MDEQ/EPA approved Glen Lake-Crystal River Watershed Management Plan as a critical watershed area).

Water Resources

Surface water bodies of the township include a small portion of Glen Lake, and several small lakes, e.g., Bow Lake, Polack Lake, Gilbert Lake, Armstrong Lake, Davis Lake, Bright Lake, Hart Lake, Wells Lake, Courson Lake, and Shisler Lake. A few small streams and drainages such as Lime Creek are also present. Because soils in the area contain excess amounts of calcium and magnesium that leach into surface waters, the inland lakes of the township are characterized as hard water. The calcium and magnesium ions bond readily with excess nutrients, such as phosphorus, that then become deposited as sediments. Since this leaves minimal nutrients for aquatic plant and algal growth, the lakes are generally clear. This same chemical process buffers the lakes from harmful effects of acid rain.

Ground water in the vicinity of Glen's Landfill has been extensively studied. The Wenck report, mentioned above, contains results of these studies. Groundwater contamination — including volatile organic compounds, nutrients, and total dissolved solids — was found. The relevant pages of this report are included in the "Ecological & Natural Features Report."

Flora and Fauna

Overview

Broadly speaking, the township lies in the Temperate Deciduous Biome of the Eastern United States. This biome encompasses many different natural communities. Communities are naturally occurring assemblages of plants and animals on the landscape that co-exist under the influence of soil, climate, hydrology, disturbance regime, intra species association, and other factors. A classification of natural communities seeks to group species assemblages into types that share similar characteristics. A detailed site inventory and mapping of plant communities and scenic resources is recommended.

The communities present in the township include dry northern forests, dry-mesic northern forests, mesic northern forests, hardwood conifer swamps, rich conifer swamps, northern wet meadows, and emergent marshes.

Vegetation cover/plant species and mammal and bird records presented by Wenck Associates of Grand Rapids as part of Glen's Landfill Environmental Assessment are indicative of the township as a whole. The tables from their report containing this information are included as Appendix C in the "Ecological & Natural Features Report." National Park Service land also has a plant inventory that may be broadly

representative of the local area. However, the inventory may not be representative of specific sites in the township due to existing microbiomes.

Forests

Pre-European settlement may have created some open lands, but for the most part the township would have been nearly completely wooded. Wooded land presently covers approximately 57% of the township. Since most of the soil is coarse and well-drained the most prevalent forest association is northern hardwoods (encompassing dry northern forest, dry-mesic northern forest, and mesic northern forest communities). Overstory species in this association include sugar maple, beech, basswood, white ash, black cherry, white pine, and hemlock. According to the Leelanau County Woodland Suitability Guide (prepared by the Leelanau County Soil Conservation District, USDA Soil Conservation Service and Michigan Department of Natural Resources) this association is approximately 75% of the township forest cover. The remainder of forest land is occupied by pine plantations, northern red oak, swamp conifers, or lowland hardwoods. Most of forest vegetation is second growth, successional. And most of the forests are younger than a hundred years.

Wetlands

Only a very small portion of the township is occupied by wetlands, approximately 5% (See Existing Land Use Map). Some of these wetlands are wooded by either lowland hardwoods or swamp conifers. Others are emergent marshes bordering ponds or scrub-shrub wetlands. The well-drained, deep glacial outwash characteristic of the township is not conducive to wetland development. However, in glacial till areas, the wetlands that do exist are critical from a biological habitat perspective because of their scarcity. They dramatically increase plant and animal diversity in the township and surrounding landscape. They are an important resource for neotropical migratory birds, they are a refuge for reptiles and amphibians, and they serve as a replenishing seed source for hydrophytic plant species.

Landmark Trees

Currently the township has no landmark trees. If we find landmark trees within the township, we recommend that landmark and other large trees in the township be mapped and identified. This could be accomplished by the efforts of interested volunteers, who could both inform themselves and others by the process. These identifications should be then added to a natural resource management plan map. The Michigan Botanical Club Big Tree database (<https://docs.google.com/spreadsheets/d/1uH6l1s3Sn6lEUeZMJGkrN0l4PtzTVoqf0xt3vX2pJXM/edit?usp=sharing>) lists several noteworthy trees in Leelanau County, but none are located in Kasson Township.

Figure 6 - Soil Types

Agricultural Cover

A large portion of the township land is utilized for agriculture. This large portion is primarily crop land. Orchards, Christmas tree plantations (approximately 24%). Open fields and pasture lands are other minor elements of the agricultural landscape, composing approximately 20% of the land.

Long Term Objectives

Note: In the following Long-Term Objectives and the Policies and Actions sections, at the end of each item you will see a number in parentheses. This number represents the Planning Commission's ranking on the over-all value of the item on a scale from "5" (very highly ranked) to "2" (lower ranked). Items from the prior 2014 Master Plan that scored "1" (unimportant) were removed from this edition of the plan.

- A. To protect, preserve, and provide a safe, healthful, and peaceful environment for all Kasson Township residents so it may remain the source of well-being for the community. (4)
- B. To preserve by all appropriate means agriculturally productive lands for farming. (4)
- C. To engender wise use, economic or otherwise, of native natural resources. (3)
- D. To promote and preserve biological diversity and to provide the means for prosperous ecosystems. (2)

Policies & Actions

1. Clean air and clean water are basic for a healthful life and paramount for the livelihood of Kasson Township's residents. Clean air shall include freedom from light pollution. The township will endeavor to maintain existing dark sky conditions through consideration of lighting alternatives or limitations as part of any permit review process. Clean air considerations shall include freedom from noxious odor. The township shall endeavor to maintain these conditions by joining with regional, national, and international groups to abate pollution and by promulgating standards in its ordinances.
2. The township will work with the county, the Leelanau Conservancy, and other entities seeking to acquire natural areas for recreation and preservation. (5)
3. The township shall cooperate with the county to ensure proper disposal of solid wastes as well as promote efficient use of resources to lessen the accumulation of solid wastes. (5)
4. The township may encourage appropriate commercial development which will provide needed services and jobs within the community, eliminating some of the need to commute or travel for everyday necessities. Among the commercial enterprises sought for the area will be agriculture and forest related value-adding activities to foster agricultural and local resource industries. (4)
5. The township shall ~~do everything possible to~~ encourage and aid farming, including providing for buffers between agricultural and residential areas, allowing development in agricultural areas on non-productive land only, providing incentives for the clustering of residential housing, and for other land uses that will allow agricultural land to remain in production. (4)
6. Soil and subsoil conditions shall be evaluated in land use decisions to avoid erosion and the leaching of unfiltered wastewater and potentially harmful substances into aquifers, lakes, streams, or other

bodies of water. The township shall encourage region-wide hydrological studies to further define critical areas and to provide information upon which to base development decisions. (3)

7. The township shall work with the Leelanau Road Commission and the Michigan Department of Transportation to keep rural and scenic standards on the township's roads and highways. Safe access should be provided for residents and for tourists to recreational areas. However, the construction of larger roads than necessary for safe travel, which also might encourage immoderate residential growth or the overuse of natural habitats, shall be discouraged by all means. (3)
8. Kasson Township shall work with farmers to develop practices to ensure that pollutants or contaminants do not reach either ground water sources or surface water resources. (3)
9. The township shall evaluate various wildlife habitats as part of its review of new projects. Greenways, buffers, and clustering of housing shall be encouraged or required to maintain a sufficient core of critical habitat and connections between ecosystems. (2)
10. Recognizing the vital role the forests play in the township's ecological health and in the maintenance of its rural character, Kasson Township shall strive to preserve its woodlands by promoting wise forestry management, including selective cutting, permanent forest management, and by including trees and other vegetation in the site plan review process. (2)

The watershed management plans developed for the four watersheds within Kasson Township are a resource to aid in this review process. For example, the Glen Lake-Crystal River Watershed Management Plan defines five critical watershed areas that warrant more extensive management consideration (ref. section 5.3, page 65). In groundwater recharge areas, particularly where there are steep slopes with highly permeable soils, it is important to protect forests and other deep-rooted vegetation to minimize erosion which can drain into tributaries during heavy rain events. This vegetation promotes ground water recharge, so important to the clean water Glen Lake inflow. A critical area for preservation is the northwest portion of Kasson Township which has a significant overlap with the Hatlem Creek sub-watershed.

Chapter 8 – Residential Land Use & Housing Policy

The general goal of Kasson Township residential land use policy is to ensure a wide range of housing types and prices while maintaining the quality of the environment and the rural character of the community. Both full and part-time residency is increasing rapidly in the township. Although the population density is still low, methods must be initiated to change the linear settlement patterns along roadways to retain the openness and views characteristic of the township. The Planning Commission is also concerned with the cost of housing in general in the township.

Income:

Per Capita Income:

1990 @ \$17,655	2020 @ \$28,613
2000 @ \$19,319—	2012 @ \$25,133
2012 @ \$25,133—	

Median Household Income @ \$54,047

Median Home Value:

1990 @ \$ 73,100	2020 @ \$186,952 (Average cash value based on the township tax roll)
2000 @ \$116,700	
2009 @ \$ 96,728	

Single family residential homes in the township are 791, per the 2021 township tax roll. The densest residential areas surround the village of Maple City. Less dense housing is in other areas of the township. Housing unit conditions are reflected in the tax rolls to be:

Single family residential (with average age being 24.2 years)

	No. of Units	% of total		No. of Units	% of total
A (Excellent)	6	0.7	CD (Fair)	89	11.3
B (Very Good)	44	5.5	<u>D (Low)</u>	<u>49</u>	<u>6.1</u>
BC (Good)	150	18.9	Total	791	
C (Average)	453	57.2			

Mobile/Manufactured (with average age being 27.5 years)

	Number of Units	% of total
A (Excellent)	0	0.0
B (Very Good)	2	4.4
BC (Good)	3	6.6
C (Average)	6	13.3
CD (Fair)	18	40.0
<u>D (Low)</u>	<u>16</u>	<u>35.5</u>
Total	45	

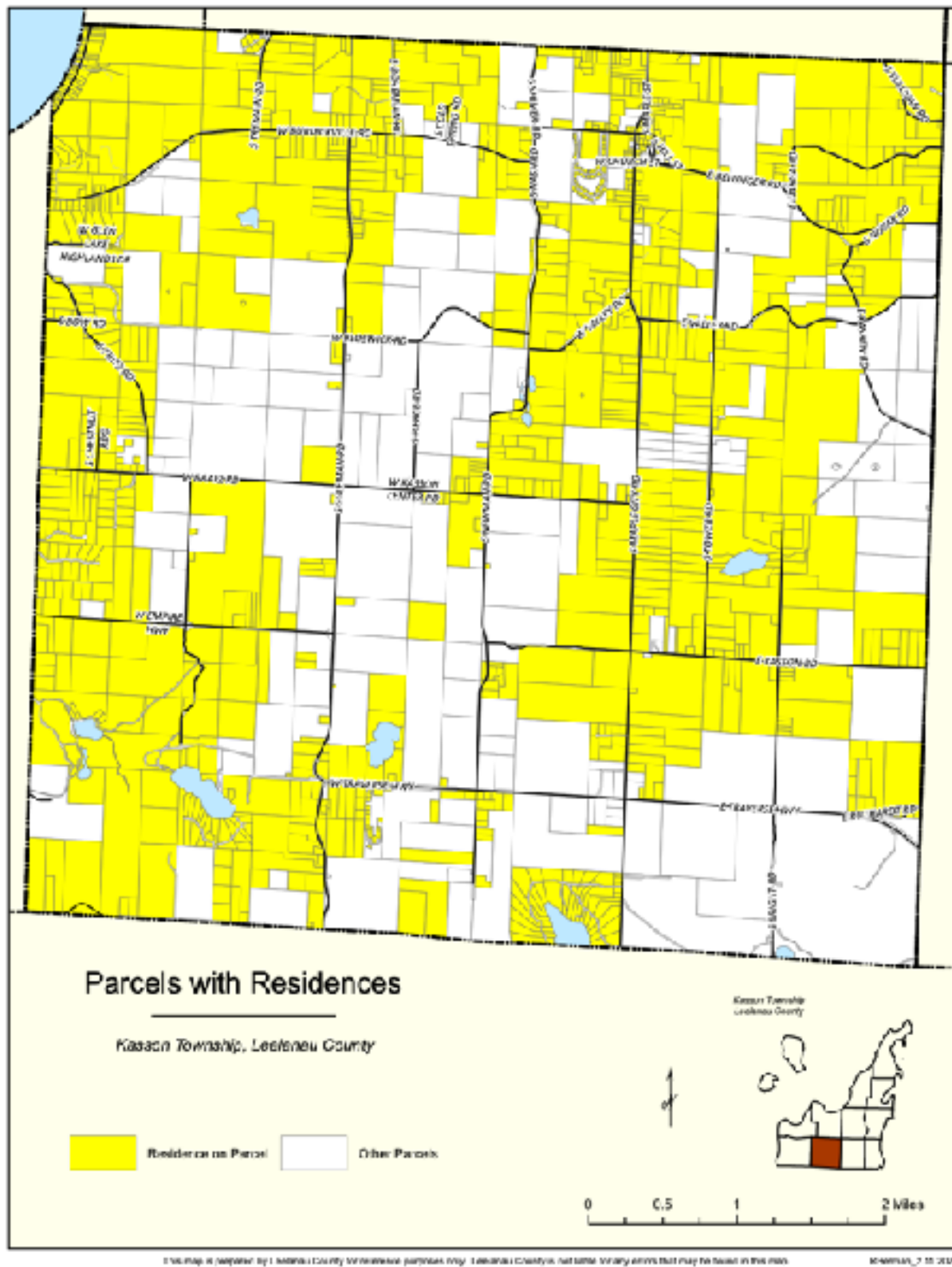


Figure 7 - Parcels with Residences

Kasson Township Building Permits.

	2005	2010	2015	2020
New Homes	7	9	8	6
Storage Buildings	16	6	14	11
Commercial	5	1	3	3
Mobile Homes	0	0	0	1
Additions & Remodeling	12	8	9	10
TOTAL Permits	40	24	34	31
Dollar Value	\$1,753,123	\$2,232,870	\$3,295,503	\$2,257,374

Data provided by the Leelanau Construction Code Office

Long Term Objectives

- A. To control the manner and placement of new housing development in order to preserve the rural character of the township. (4)
- B. To mandate and enforce adequate buffers and proper regulations of nonresidential uses to ensure the quiet enjoyment of their homes by the residents of the township. (4)
- C. To manage growth, especially in prime natural resource areas; to prevent over burdening public services; and to prevent destruction of the native terrain and pollution of the township's resources. (3)
- D. To continue to ~~provide~~encourage a variety of housing for all economic levels of Kasson Township residents. (3)

Policies & Actions

- 1. Land use permits may be required of all operations that change the land or landscape. A site plan shall be required to obtain this permit. Grading, septic installation, or house construction may require land use permits. (5)
- 2. Higher density development shall be placed ~~only~~ near the village or ~~only~~ in other suitable locations, near services and facilities. A Planned Unit Development District is included in the Zoning Ordinance to allow for potential future higher density developments elsewhere. (5)
- 3. In order to maintain rural character and to preserve undeveloped native terrain, low residential densities shall be maintained outside the village. Higher-density areas with open space and conservation planning shall be the standard method of development in these areas. (4)

4. Criteria used to evaluate any new rezoning requests or new subdivisions shall include anticipated traffic impacts, increased demands on public facilities, and effects upon the native terrain. (4)
5. Planned developments: clustered housing with large buffers and undeveloped spaces, coordinated with the natural resources plan and careful site analysis for natural features, shall be the residential development methods of choice. (4)

FINAL

Chapter 9 – Economic & Commercial Development

This element of the Master Plan presents long-term goals for the economic health of Kasson Township. The value of the natural resources and native terrain to the well-being of the community has already been amply stated but must be reiterated here in relation to the economy: all land uses, and activities should be measured by the effects they might have upon the beauty and integrity of the community environment, especially those resources treasured by the township's residents - the forests, the farmsteads, and the abundant wildlife associated with them.

With an eye to preservation of the quality of the existing environment and community character, the paramount land use issues therefore are:

- Where should commercial development be allowed and encouraged?
- What uses might be prohibited or restricted?
- How should existing businesses be aided to continue and to expand, if desired?

The township's many assets include:

- A well-educated citizenry;
- A fair quantity of productive farmland and wood lots;
- An ample supply of high-quality gravel deposits;
- The regional landfill;
- The township realizes an inflow of 12% of total income as Social Security and public assistance payments, as compared to 10% state-wide — accounted for by a substantial number of retirees;
- A large influx of summer residents and tourists, many only passing through the area.

The assessment of the economy of Kasson Township is bound up in an examination of the general Leelanau-Grand Traverse-Benzie region, a region that is an attractive location for many people because it combines abundant natural attractions with a perceived desirable northern Michigan lifestyle.

Although many retirees have historically been moving to the area, all age groups are migrating to the township because it is a nice place to live. Added population means added commercial activity. Therefore, jobs, support systems, and infrastructure may be required in increased quantities to serve this added population. This march of change has and will continue to affect Kasson Township. Clearly though, most of the change is originating from sources not controlled by Kasson residents. Not all such sources of change are new to the area.

Localities such as Kasson Township are perhaps slower to be affected by the direct changes to the area since they do not share the waterfront resources or the winter tourist recreational outlets which serve as population magnets for neighboring communities. In terms of recreation, Kasson Township is mainly an area to pass through to get to somewhere else.

Understanding the local market potential is basic to any discussion of local economic activity. Even if there is no local interest in developing the local market potential, the numbers are not secret. At some point, some motivated outside force may well act on untapped market potential. Therefore, we should look at how an outsider might examine the market potential of Kasson Township.

Kasson Township is a small community when measured by population. As such, not many official statistics are kept on a regular basis for the economic activity of the township. Much more information is available at the county level. By combining county level information from several sources with the township information that is available, we begin to draw a picture of the market area for Kasson Township.

Except for the communities of Maple City, Cedar, and the village of Lake Leelanau, the population centers of the county tend to be on the water and circle the peninsula. Most county communities appear to be self-sufficient with respect to commodity goods. This, along with geography and the resulting system of roads, make it unlikely that any significant number of residents of one of these communities would routinely drive to another community to buy a quart of milk or any other product easily available closer to home.

Our conclusion is that for non-specialty products, the Kasson Township market area is functionally Maple City-Cedar and covers the center of the Leelanau peninsula; bounded on the south by Traverse Highway (M-72), on the west by Glen Lake, and on the east by Lake Leelanau.

Population growth is the engine which will drive changes in Leelanau County and thus by association in Kasson Township. To date, Kasson Township has been perhaps an unnoticed asset to the entire region since it is both the site of the primary landfill in the entire multi-county region and has substantial valuable deposits of accessible gravel — a key construction material for roads and structures. Growth places a premium on these assets of Kasson Township.

Kasson Township provides considerable gravel, agricultural, and waste services to the region's economy. Additionally, the economic value of the local residents as employees should be noted:

- 96% of the population has at least a high school diploma
- 31% possess a bachelor's degree or higher
- A labor force participation of 61%
- A full-time employment percentage of 66%
- The four most common categories of job titles are:
 - Office and administrative support
 - Sales and related
 - Construction and extraction
 - Management
- The most reported self-employment categories, which represent 59% of all self-employed, are:
 - Arts, entertainment, recreation, accommodation, and food services
 - Retail trade
 - Construction

Kasson Township is uniquely situated close to Traverse City and other nearby population centers like Glen Arbor, Empire, and Cedar, as well as a large, seasonal, lakefront population within driving distance. Kasson Township supports many working class, year-round residents who choose to live here for the natural beauty, professional opportunities, and recreational offerings found nearby. As we look toward the growth of home-based employment in the age of remote office technology and combine it with an increase in service-based employment associated with an aging regional population, this trend for residential growth in our township will likely gain momentum. The competitively priced real estate in Kasson Township, desirable school system, and the proximity to existing and expanding employment opportunities, suggests that the population of year-round residents and the economic value of these

residents within the township will expand. This highlights the importance of protecting the quality of life here for those residents by appropriately balancing natural resource development, agricultural production, commerce, and waste services with maintaining the aesthetic, environmental health, and other desirable attributes of the township into the future.

Commercial land uses anticipated and desired by township residents include office, professional, retail, and restaurant establishments. Currently, small-scale business activity is scattered throughout the township with a small congregation of business and public facilities centered in the Village of Maple City. As discussed throughout this plan, Kasson Township is home to intensive mining and ancillary activities and to the regional landfill.

The Planning Commission and Township Board intend for the village to remain a center of commercial activity and to grow with mixed commercial and residential uses while retaining its village character. From our investigation of area economic data, it appears there is ample opportunity to accomplish this. Two other zones of limited scale commercial activity are designated, one at the west township border on West Empire Highway (M-72) and the other at South Maple City Road (County Road 667) and Traverse Highway (M-72). Tourist-related and highway service types of uses, along with other compatible enterprises, **including mixed uses**, are indicated for these areas.

The largest commercial area designated in this plan is the Gravel District. It has been so designated, as previously noted, as an indication to developers, entrepreneurs, and possible home builders of the area, that the township intends this area primarily for gravel mining and other currently allowed uses. This plan sets out (with clarifications to be accomplished in the zoning ordinance) potential future allowed uses to be planned for and accomplished upon reclamation of exhausted gravel sites. Some future potential uses for this district might be:

- Planned residential developments
- Natural area park
- Recreational facility
- Alternative energy facilities

In order for any uses to be installed in the future, the site plan and reclamation plan should include retention and rejuvenation of the native terrain and reintroduction of agricultural operations in order to fulfill the primary goal of this plan — to maintain the rural character and the balance of natural attributes of the township.

Large buffer areas along the roadways and between intensive uses and residential complexes must be maintained during gravel extraction operations. Buffers must also be maintained or established after gravel operations cease and before other intensive uses would be allowed. Therefore, required plans, before issuance of permits for operation, should require identification of post-reclamation uses and include the maintenance of buffers (or a scheme for creating them in a timely way) for the intended future uses.

Finally, the township encourages Glen's Sanitary Landfill, Inc. and **WM, Inc. (formerly Waste Management, Inc.)**, as one of the most prominent commercial enterprises in the area, to work with the township to promote the betterment of the township and the region.

Long Term Objectives

- To encourage diverse commercial opportunities within the township's existing commercial zoning districts. (5)
- ETo** encourage enterprises that can add value to local resources or products. (3)

- C. To allow and encourage mixed commercial uses and higher-density housing at Maple City and to promote its growth. (3)
- D. To provide other areas outside the village of Maple City for commercial enterprises at specific nodes for future development. (3)
- E. ~~E~~To ensure continued home occupation activities.
- F. To regulate the extraction of gravel within the designated gravel district. (3)
- G. ~~S~~To strengthen~~ing~~ the requirements for identifying post reclamation gravel pit uses.
- H. To support the construction of adequate roads and other infrastructure to support commercial activities. (2)
- I. ~~E~~To encourage development of high tech and communications infrastructure to support entrepreneurship employment opportunities, specifically internet and fiber optics, while maintaining community esthetics and character.

Policies & Actions

1. The Kasson Township Board and Planning Commission shall help to provide the conditions that will aid and foster existing businesses within the township. (5)
2. Continue to support home businesses activities that are not nuisances within their districts or neighborhoods. (5)
3. Promote cottage industry, home businesses in rural residential areas. (5)
4. Site plan review shall be required of all non-residential uses to ensure adequate buffers for the protection of the native terrain, as well as proper site facilities. (5)
5. Participate in county and regional planning to make certain Kasson Township's interests are being promoted and achieved. (5)
6. Appropriate commercial entities shall be located in designated areas in the township. Any requests to develop commercial activities outside designated areas shall be vigorously discouraged. (4)
7. The possibility of a light commercial or office park to be sited in the reclaimed gravel district shall be investigated. (4)
8. Special standards might be promulgated for the village of Maple City to maintain its small-town character. (4)
9. Ordinances and regulations shall be promulgated to approve desired enterprises, but also to protect the natural resources, rural character, and quiet enjoyment of the community. (4)
10. Encourage enterprises that can add value to local resources or products. (3)
11. Cooperate with entrepreneurs wishing to locate desirable businesses in the township by making

rules and regulations for site development clear and straightforward. Be willing to work with them to bring appropriate projects to fruition. (3)

12. Prepare a Capital Improvements Program for the township when necessary.

FINAL

Chapter 10 – Transportation

The private automobile is the primary means of transportation in Kasson Township. There are some scattered private airfields in the area. Public transit is available on-call through the Bay Area Transit Authority.

The Commission believes the township roads to be well maintained, with some providing paved shoulder routes for bicycles.

The commission discussed the purposes of roadways and their necessary construction based upon uses, or proposed uses, along them. The arterials through the township were denoted — East Bellinger/West Burdickville Roads through Maple City to Glen Lake Schools and Glen Lake; and the north-south routes — S. Maple City Road and S. Coleman Road/S. Bohemian Road (collectively designated CR 669). South Maple City Road links Maple City with Traverse Highway (M-72). S. Coleman Road/S. Bohemian Road services much of the gravel and agricultural areas of the township, linking M-72 and M-22. State highway M-72 traverses the southern portion of the township linking the west coast of Michigan to points east, all the way to the coast at Harrisville on Lake Huron.

The commission also noted that over-improving roads could lead to increased development, especially residential development. Mobility for a rural area such as Kasson Township is of great importance, since most workers commute; and services and facilities are not often within walking or biking distance. However, if traffic is not channeled properly and development is allowed to continue to spread along the arterial roads, the peace, quiet, and pure air prized by township residents could be diminished markedly. Private or public roads to be developed off the main roads shall be preferred.

Bicycles are rarely considered or used as a means of transportation; but in order to encourage greater use and to provide safer and better means for the many **bikersbicyclists** who travel through Kasson Township and Leelanau County, this plan encourages paved shoulder routes or separated pathways where possible.

Long Term Objectives

- A. To maintain the beauty of the township as viewed from its roadways. (4)
- B. To discourage over-building of roads. (4)
- C. To encourage local enterprise, decrease the need for commuting or shopping trips outside the area. (3)
- D. To promote the construction of local private or public roadways to limit the number and frequency of access points along designated collectors. (3)
- E. To provide a sufficient transportation system for all the township needs. (2)

Policies & Actions

1. All land use decisions (e.g., rezoning, site plan reviews), should consider including traffic impacts and other transportation considerations. (5)
2. Higher density residential development shall be close to goods and service providers to ~~decrease the number and length of trips outside the area.~~ (5)–
3. ~~Decrease the number and length of trips outside the area.~~ (5)
3. Problem traffic areas shall be identified, and possible solutions forwarded to the road commission for its consideration. (5)
4. Paved pedestrian pathways should be installed in village areas to encourage non-motorized trips and to provide a safe means to do so. (4)
5. Buffer zones of undisturbed trees and other vegetation, as well as new landscaping, should be encouraged of all new residential developments to separate residential areas from arterial or collector roadways. Commercial developments should be required to install street trees in accordance with an overall goal of tree-lined streets and highways and the scenic presentation of the township. To implement this policy, a new Landscape Overlay District, covering all uses and districts, should be developed and added to the Kasson Township Zoning Ordinance. (4)
6. The township should cooperate with the Bay Area Transit Authority to ensure that local citizens ~~without autos or unable to use them because of handicaps,~~ are able to obtain transportation to meet their needs. (4)
7. Adequate off-street parking should be required of all new construction (except in the village, where public or joint parking might be necessary). (2 in favor + 2 neutral)
8. Provision for snow removal should always be considered in parking and roadway plans. (4)
9. Identify rural areas where roads will remain agricultural or residential. Have designated as "Natural Beauty Roads" if they meet necessary standards. (3)
10. Identify bicycle pathways and work with agencies to obtain funding to install both shoulder and off-street paths. (3)
11. The township should encourage participation by its residents, and others commuting to the township, to use ridesharing or vanpooling to lessen air pollution. (3)
12. Work with the Leelanau County Road Commission, Traverse Transportation Coordinating Initiative (TTCI), Networks Northwest, and Bay Area Transit Authority (BATA) to further the above aims — to ensure that township needs are addressed, and that the township is aware of all funding possibilities for its transportation needs. (3 in favor + 2 neutral)

Chapter 11 – Utilities & Public Services

Kasson Township is a small rural community and thus its municipal government provides limited services and has few facilities. As in most rural townships in Michigan, the county or a consortium of counties provide most governmental functions including police, public health, social services, soil erosion, building inspection, and planning services. Leelanau County, either by its own staff or by contract with other agencies, supplies these services for Kasson Township. The county road system is administered by the Leelanau County Road Commission.

Fire suppression and emergency services are provided in the township by Cedar Area Fire & Rescue (CAFR), of which Kasson Township is one-quarter owner, along with Centerville, Cleveland, and Solon Townships. The fire department is in the Village of Cedar near the northeast corner of Kasson Township. Mutual aid is provided by several other local departments, including Glen Lake Fire Department to the west, Leland Fire & Rescue to the north, Elmwood Township Fire Department to the east and Almira Township Fire & EMS Department to the south. The CAFR Fire Department is about three miles from Maple City and seven miles from the Glen Lake Community Schools campus. CAFR is a Basic Life Support department, staffed 24/7 by full-time firefighter/EMTs, with Advanced Life Support coverage provided as necessary by paramedics through agreements with the Glen Lake Fire Department and Mobile Medical Response (Traverse City).

There is not a public water system nor a sanitary sewer system within the township. Water and sewage disposal is handled privately, and in all cases, by individual parcel. Most soils in the township are sandy or gravelly and accommodate septic systems easily but may require drilling deeper water wells in some locations.

Solid waste disposal is provided locally for a fee. County-wide recycling, supported via a millage, is available at various sites throughout the county.

Public and private suppliers of utilities are available throughout the township and county. Electric power is available throughout the township as is a telephone system. The natural gas system, cable TV networks, and broadband internet serve limited areas of the township. Cellular phone service is available through multiple carriers.

Storm drainage in the township occurs almost entirely by natural systems, aided by ditching and the placement of culverts to ensure proper flow past ~~man~~human-placed obstacles. The Soil Erosion, Sedimentation and Storm Water Runoff Control Ordinance, ("Storm Water Ordinance"); was adopted by the county in April 2003. This ~~plan~~ordinance supports ~~that objective these methods~~ and suggests adoption and implementation of regulations including site plan review, land division review, and subdivision regulations. Retention and detention of storm waters should be required to prevent erosion and pollution of surface and ground waters. Wetlands should also be preserved and utilized to naturally and effectively slow and cleanse storm water run-off.

~~Ground water pollution from~~ the old Leelanau County dump site adjacent to Glen's Sanitary Landfill, Inc. has been and remains a source of concern to ~~T~~township residents ~~concerning ground water pollution~~. Test wells have been installed to monitor ground water pollution as mandated by The State of Michigan. Tests from the wells are conducted four times a year and forwarded to the state.

Future proposals to construct alternative energy generation facilities ~~will be encouraged to be situated such that they do not~~ ~~that~~ have an impact on reducing productive farmland or valuable wood lots should be discouraged.

Chapter 12 – Public Facilities

Township Hall

Kasson Township Hall is located at the intersection of S. Newman Road and W. Kasson Center Road. The hall was purchased from the Michigan State Grange in 1968. Since it is located on a two-~~(2)~~-acre parcel, there is adequate room for expansion if and when necessary. The hall is used for township government meetings and as an election polling location, as well as being available for rental for small public and private uses.

Schools

The local area Glen Lake Community Schools campus is in Kasson Township on West Burdickville Road (CR 616) near the northwest corner of the township. The campus houses kindergarten through high school grade 12. Glen Lake students may also access vocational programs in Traverse City at the Career Tech Center and the Manufacturing Technology Academy, both administered through ~~the Traverse Bay Area (TBA) Intermediate School District~~ Northwest Education Services (formerly TBAISD).

Parochial schools are available outside the township, in Lake Leelanau, and Traverse City. Private schools are also available nearby, although not located in the township: Leelanau Montessori Public School Academy, the Leelanau School, Pathfinder School, and the Interlochen Arts Academy.

Northwest Michigan College, located in Traverse City, is the only institution of higher learning in the area. High school dual enrollment courses, cooperative, life-long learning, and extension courses from state universities may be taken at the college, with various degree programs available. The college has extended its funding base and broadened its reach by electronically networking with local school districts, including the Glen Lake Community Schools, and other cooperating universities in the State.

Cemeteries

There are seven cemeteries within township boundaries:

- Wilson-Holden - Section 33, east side of CR 669 ~~approximately one mile~~ south of M-72 ~~approx. 1-mile~~.
- St. Rita - Section 10, east side of CR 667 - ½ mile south of Maple City.
- Nash-Pettengill - Section 10, east side of CR 667, 0.63 miles south of Maple City and due south of St. Rita cemetery.
- Rose Hill - Section 19, at the intersection of M-72 & Fritz Road.
- Kasson Township - est. 1892, Section 2, north of Maple City, south side of Cemetery Road east of CR 667.
- Round Top - est. 1870, Section 11, west side of Tower Rd, between Valley Rd. and East Kasson Road.
- East Kasson - Section 26, south side of East Kasson Road near intersection with CR 667.

Some of these cemeteries may be located on private property.

Parks and Recreational Facilities

Kasson Township is home to Leelanau County's largest park, Miles Kimmerly. It is located on West Burdickville Road, about halfway between Maple City and the Glen Lake school, across from Maple Valley nursing home. The park is approximately 120 acres, with three tennis courts, baseball fields, soccer fields, a children's playground, sledding hill, golf driving range, an 18-hole disc golf course, volleyball courts, the Pat Hobbins Walking Trail, and barbeque and picnic areas. Across the road, local 4-H clubs have renovated and installed two new arenas for horse shows and livestock activities.

Leelanau County's historic Poor Farm Barn is also located on the Miles Kimmerly Park property, adjacent to the horse and livestock arenas. The Leelanau County Historic Preservation Society (LCHPS) a nonprofit, hopes to have revitalized the structure; it provides interpretive exhibits on the barn and the history of the Poor Farm; host lectures, concerts, plays, and gatherings to benefit the residents of Leelanau County. Buckets of Rain, another nonprofit, also has a small community garden adjacent to the barn.

In 1996 Kasson Township purchased 1.19 acres adjacent to the Cedar-Maple City Lions Club, located in downtown Maple City. This park has been developed as a township park and provides a children's playground, picnic tables, and grills.

Other public recreation facilities are located at the Glen Lake Community Schools. The campus has a football field, running track, a baseball diamond, and an outdoor soccer field. A gymnasium for basketball and other indoor sporting activities can be reserved, when available, during non-school hours. There is also a playground for the younger students.

The Bow Lake unit of Sleeping Bear Dunes National Lakeshore is in the township, north of Baatz Road near Fritz Road. It offers hiking on the 3-mile-long Kettles Trail that was opened in October 2019. The unit is a unique glacially created landscape and aquatic habitat of a spring-fed fen and bog with emergent wetlands and glacial kettle lakes.

Old Settlers Park, located just outside the township borders on S. Dunn's Farm Road (County Road 675), offers access to LittleBig Glen Lake, a shaded picnic area, gazebo, playground, and a chapel. The annual Old Settlers Picnic is held here each August, as is a 4th of July flag raising and community program of patriotic songs and music.

Other public recreation facilities locally available to Kasson Township residents are the tennis courts and baseball fields in Cedar, and public access to local lakes at Lime Lake, Glen Lake, Armstrong Lake, Garey Lake, Lake Leelanau, and Lake Michigan. Access to other nearby state and federal forest and park lands provide recreation opportunities including boating, fishing, horseback riding, picnicking, and swimming.

Privately owned, the Cedar Rod and Gun Club, located within the township on Sullivan Road, offers skeet, trap, target shoot and sporting clays. The club also offers safe gun handling courses to the public.

There are several campgrounds in the area, including the D. H. Day and Platte River Campgrounds (National Park Service), Garey Lake State Forest and Equestrian Campground, Lake Ann State Forest Campground, Indigo Bluffs RV Resort and Spa, Empire Township Campground, and Leelanau Pines Campground.

The Glen Lake Community Library serves, and is funded by, the townships of Kasson, Empire, and Glen Arbor. A newly renovated main library building is in the Village of Empire. Historically, the library has

maintained a small, limited-service center in Maple City. Although these historically provided services have been somewhat curtailed recently in Maple City, it is the library's intention to continue its former level of service when an appropriate space becomes available. The library continues its presence thru a drop-off box on the north side of Pegtown Station for patrons to return books.

Long Term Objectives

- A. To provide and maintain basic facilities and services deemed necessary and within the purview of the township government for the health, safety and welfare of Kasson Township residents. (4)
- B. To utilize effectively existing funding sources and to investigate new sources of funding for the provision of facilities and services deemed necessary. (4)
- C. To plan for continued expansion and improvement of facilities necessitated by increasing population and tourism. (3)
- D. To work with the Glen Lake Community Schools, surrounding townships, the county, and Networks Northwest to coordinate plans for sufficient facilities and services in the entire region. (3)

Policies & Actions

- 1. The township shall investigate the need for and feasibility of installing public water and sewers or other joint operating systems in Maple City and any other densely developed areas around the township lakes. (4)
- 2. Continue to support the county solid waste and recycling plans. (4)
- 3. Communication with the Glen Lake Community School District should be maintained and efforts to coordinate, and not duplicate, facilities and services should be undertaken. (4)
- 4. Transportation and roadway needs will be monitored annually and the best measures taken to implement the objectives of this plan. (4)
- 5. The township shall continue to work with Leelanau County to provide social, cultural and recreational facilities and programs for township residents and residents of the entire area. (3)
- 6. Representatives to be sent to Leelanau County meetings and the meetings of Networks Northwest to help coordinate efforts within the county and region, and to ensure the township's needs are properly addressed. (2)